UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,966	03/30/2004	Yoshinori Endo	566.43723X00	2881

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20457	7590	09/22/2006	LOUIE, WAE LENNY

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/13/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☒ Other: *R.s.letts 1449's*

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-15 are rejected under 35 U.S.C. 102(b) as being anticipated by

Myr (6,615,130).

Regarding applicant claim 1, Myr discloses a travel time calculating method of a

navigation device (column 5, lines 24-67 "guidance system") comprising a storage

device which stores the following:

(1) map data (column 5, lines 49-50 "maintaining and updating digital

geographical maps")

(2) statistical data including a travel time or a moving speed, which are

determined by statistical values of traffic information collected in the past (column 5,

lines 45-46 "managing, processing, storing, and updating regular **statistical travel**

times"), where also the statistical data is classified by collection condition of the traffic

information (column 5, lines 14-20, "database containing travel times for all sections of

roads at a particular time of the day, for a particular time of day of the week, etc.").

Myr further discloses the ability of the navigation device to execute the following:

(1) a step which sets departure position and destination (column 7, lines 18-19,

"the client may enter the **SP** [start point] and **DP** [destination point] manually");

(2) a step which sets a plurality of departure time candidates (column 12, lines 1-43, "at particular hours, at particular days of the week, etc... statistical travel times based on corresponding empirical speed coefficients may be calculated");

(3) a step which calculates travel time based on map data, statistical data (column 9, lines 15-30 "route-planning **algorithm calculates** the route using multilevel map database, requesting travel times for various sections") and also obtains travel times for respective route constituting links and obtains a travel time between by summing up travel times of respective route constituting links (column 2, lines 62 to column 3, line 3, "travel time between two road intersections A and B is the **sum** of travel times for all sections of roads connecting A and B" and "must be able to determine travel times for all sections of roads connecting those positions").

Regarding applicant claim 2, Myr further discloses a travel time calculating method of a navigation device wherein:

(1) statistical data includes a travel time by time zone for each link (column 14, lines 15-33, "stored in the CTU database as attached to all sections of roads according to a number of categories: type of road, day of the week, month in the year");

(2) a calculating step that calculates travel time by using a travel time corresponding to a time zone including a departure time of said departure position included in said statistical data (column 25, lines 1-54, "storing and updating statistical data on traffic parameters at least on a limited number of individual roads; further subdividing said statistical data according to time into subdivisions... calculating travel times based on travel time traffic updates")

and a travel time corresponding to a time zone including an expected arrival point of time at a termination node of (n-1)th route constituting link, being connected to the (n)th route constituting link (column 25, lines 40-54, "calculating fastest travel routes using said current travel time estimates in the zones contiguous to the vehicle while using statistical travel times in the zones situated further from the vehicle").

Regarding applicant claim 3, Myr discloses a method where the navigation device executes a route specifying step which specifies a route between departure and destination and obtains with respect to each departure time candidates, a travel time of the route (column 14, lines 1-14, "the CTU provides for clients requesting travel time between their present position and their desired destination the **theoretical travel times**").

Regarding applicant claim 4, Myr teaches a method where the navigation device executes a route searching step which searches for a route between departure and destination and obtains with respect to each departure time candidates, a travel time of the route searched (column 16, lines 25-50, "optimal route on a graph of roads could be done by using algorithm A* developed in the field of Artificial Intelligence by Hart et al. This process is repeated for all sections that are being considered by algorithm A* until an optimal travel route corresponding travel time have been calculated").

Regarding applicant claim 5, Myr teaches a method where the navigation device obtains, with respect to each of said departure time candidates, a travel time for a route which has the shortest travel time, which is searched by use of map data and statistical data (column 9, lines 15-30, "route-planning algorithm calculates the optimal route while

using multilevel map database, requesting **travel times for various sections** from the

section travel time managing algorithm and using the returned section travel times for

further processing").

Regarding applicant claim 6, Myr discloses a displaying step, which displays

departure time candidates, the travel time obtained in the travel time calculating step

(column 9, lines 15-30, "using the returned section travel times for further processing,

the shortest route calculated is communicated to the user via the communications

system and is **displayed on the display unit**").

Regarding applicant claim 8, Myr discloses a navigation device wherein

departure setting step includes a step which receives a selection whether the departure

time candidate is set to the current time, or to the time beyond the current time (column

9, lines 15-29, "as shown in FIG. 6, in block 136, the route planning algorithm calculates

the optimal route while using multilevel map database block 137, requesting travel times

for various sections from the section time managing algorithm in block 138")
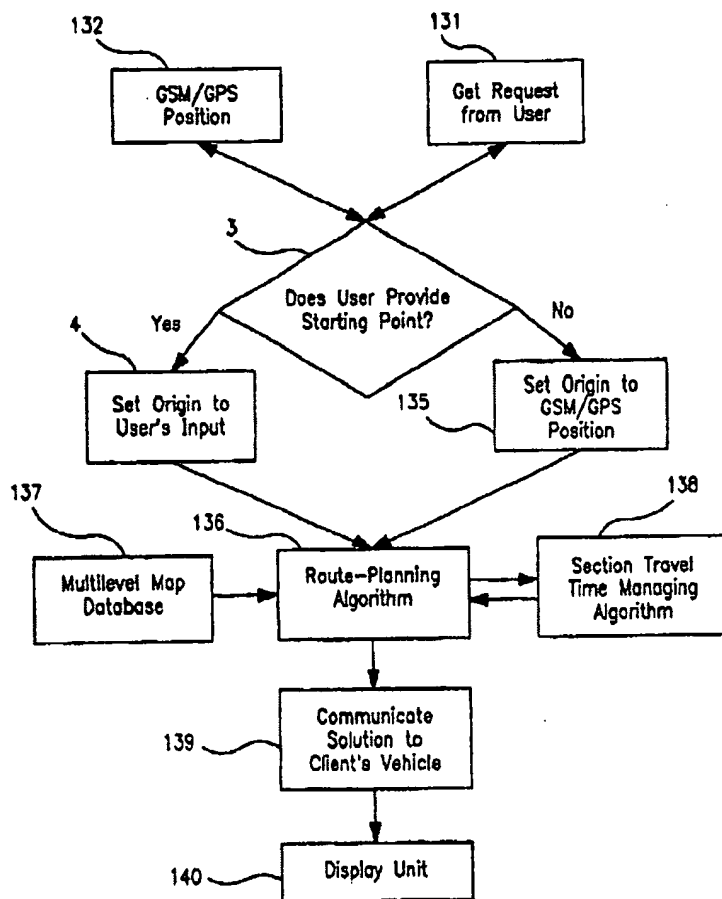
Fig. 6

Regarding applicant claim 9, Myr discloses a traffic information displaying

method of a navigation device wherein the navigation device comprises a storage

device that stores:

(1) map data (column 5, lines 49-50);

(2) statistical data that includes travel time based on statistical values of traffic

information collected in the past (column 5, lines 41-55);

(3) information for deciding whether the travel time is generated from actual

measurement data or is generated from an interpolation process on the actual data

(column 13, lines 5-20, "everything associated with each particular zone is stored in the

CTU database: theoretical travel times, regular or statistical travel times").

Myr discloses differentiation between the travel time of each link generated from

actual measurement data (current travel time or CTT) and the travel time generated

from an interpolation process (regular travel time or RTT). However, the actual and

interpolation times of Myr (column 14, lines 15-65) are not displayed as differentiated

cases on the display. Myr does disclose "the displays can be changed or customized

as desired by the manufacturer or user according to the information specified by the

user" (column 9, line 32- column 10, line 4).

Regarding applicant claim 10, Myr discloses a traffic information displaying

method where the interpolation processing is not displayed (column 14, line 1-14

"whenever possible, these theoretical times will be replaced by estimated empirical

travel times')

Regarding applicant claim 11, Myr discloses a traffic information displaying

method having a current position detecting function, where the navigation device

comprises a storage device which stores:

(1) map data (column 5, lines 49-50);

(2) statistical data that includes travel time based on statistical values of traffic

information collected in the past (column 5, lines 41-55);

and where the navigation device executes:

(1) a step which obtains present status traffic information of the links present in the periphery of a current position (column 14, lines 35-48, the present guidance system makes real time monitoring of all roads in category)

(2) a step which receives a selection of a display mode for displaying information based on statistical data or a mode for displaying present status traffic information (column 9, line 32- column 10, line 4 "A screen display includes shortest time estimate, shortest distance estimate, path recalculation data and user input data... the displays can be changed or customized as desired by the manufacturer or user according to the information specified by the user... in addition, the driver may receive visual summary of all traffic situations and slowdowns in real time");

(3) a step which displays in the display mode selected (column 9, line 32- column 10, line 4).

Regarding applicant claim 12, Myr discloses a traffic information displaying method which further executes a step that switches the display mode to display the information based on the present status traffic data, when an operation other than an operation to maintain displaying the information based on the statistical data is conducted (column 14, lines 35-65 "the criterion for using Current Travel Time rather than Regular Travel Times if contains recent enough data")

Regarding applicant claim 13, Myr discloses a navigation device comprising a storage means which stores:

(1) map data (column 5, lines 49-50);

(2) statistical data that includes travel time based on statistical values of traffic

information collected in the past (column 5, lines 41-55), where said statistical data is

classified by collection condition of traffic information.

The navigation device further includes the following:

(1) sets a departure position and a destination (column 7, lines 18-19)

(2) sets a plurality of departure time candidates (column 12, lines 1-43)

(3) calculates travel time with respect to departure time candidates, map data,

and statistical data (column 14, lines 1-14)

(4) obtains travel times for route constituting links (column 3, lines 1-3, "must be

able to determine travel times for all sections of roads connecting those positions")

(5) obtains a travel time between departure position and destination by summing

up respective route constituting links (column 2, lines 62-67, "travel time between two

road intersections A and B is the **sum** of travel times for all sections of roads connecting

A and B").

Regarding applicant claim 14, Myr discloses a navigation device comprising a

storage means which stores:

(1) map data (column 5, lines 49-50);

(2) statistical data that includes travel time based on statistical values of traffic

information collected in the past (column 5, lines 41-55),

(3) information for deciding whether the travel time is generated from actual

measurement data or is generated from an interpolation process on the actual data

(column 13, lines 5-20, "everything associated with each particular zone is stored in the

CTU database: theoretical travel times, regular or statistical travel times").

Myr discloses differentiation between the travel time of each link generated from

actual measurement data (current travel time or CTT) and the travel time generated

from an interpolation process (regular travel time or RTT). However, the actual and

interpolation times of Myr (column 14, lines 15-65) are not displayed as differentiated

cases on the display. Myr does disclose "the displays can be changed or customized

as desired by the manufacturer or user according to the information specified by the

user" (column 9, line 32- column 10, line 4).

Regarding applicant claim 15, Myr discloses a navigation device comprising a

storage device which stores:

(1) map data (column 5, lines 49-50);

(2) statistical data that includes travel time based on statistical values of traffic

information collected in the past (column 5, lines 41-55);

and where the navigation device executes:

(1) step which obtains present status traffic information of the links present in the

periphery of a current position (column 14, lines 35-48, the present guidance system

makes real time monitoring of all roads in category)

(2) step which receives a selection of a display mode for displaying information

based on statistical data or a mode for displaying present status traffic information

(column 9, line 32- column 10, line 4 "A screen display includes shortest time estimate,

shortest distance estimate, path recalculation data and user input data... the displays

can be changed or customized as desired by the manufacturer or user according to the

information specified by the user... in addition, the driver may receive visual summary

of all traffic situations and slowdowns in real time")

(3) step which displays in the display mode selected (column 9, line 32- column

10, line 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myr as

applied to claim 1 above, and further in view of Yoshida (5,699,056).

Regarding applicant claim 7, Myr discloses a set of empirical travel times based

on statistics collected in the past which are preserved in the form of "speed coefficients"

(column 13, lines 25- 45). The "degree of jam" by time zone in claim 7 can be inferred

as the "speed coefficients" of Myr. Myr does not specifically mention the display of the

degree jam.

Yoshida, however, also drawn to methods of traffic information systems, teaches

the proportional relationship of the duration of a trip with degree of jam as illustrated in
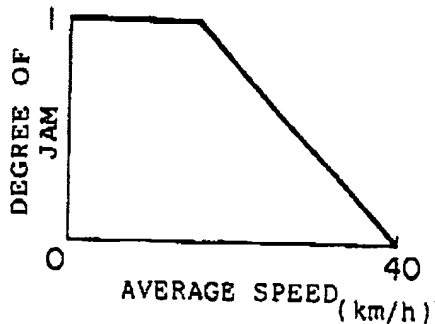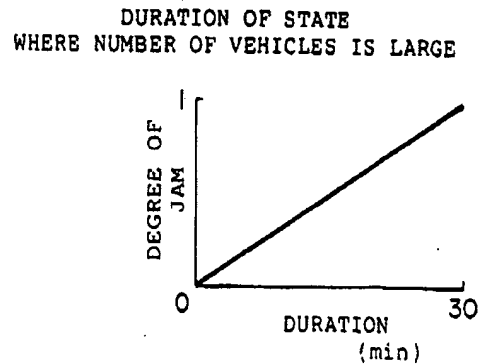
Figs 34a and 35a.

Fig.34a

Fig.35a

DURATION OF STATE
WHERE NUMBER OF VEHICLES IS LARGE

It would have been obvious to one of ordinary skill in the art at the time of

invention to interpret the display of the travel time or average speed as also including
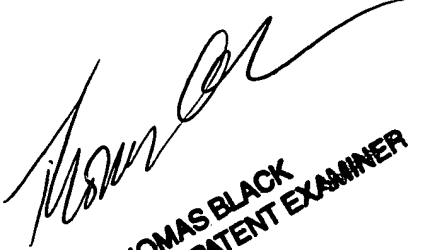
the degree of jam.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Wae Lenny Louie whose telephone number is 571-272-

5195. The examiner can normally be reached on M-F 730-1600.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WLL

THOMAS BLACK
SUPERVISORY PATENT EXAMINER